

## Abstract

The invention discloses a method that identifies whether a channel is LOS or NLOS in a mobile communication system. After coherent accumulation and non-coherent accumulation have been made by the system, first the method takes power difference between the direct path and the non-direct path in a same power delay profile to identify a channel; and then the result is further determined by  $\bar{\tau}/\sigma$  difference of a LOS channel and a NLOS channel (where  $\bar{\tau}$  and  $\sigma$  is the mean delay and the RMS delay spread of a multipath power profile, respectively). A channel is determined as a LOS channel, if the power ratio of the Maximum Path to the Local Maximum Path is greater than a threshold  $K$ , and simultaneously the arrival time difference between the First Path and said Maximum Path is less than a time interval  $T$ ; otherwise it is a NLOS channel. The method is easier to implement and compatible with the present mobile communication system.